2014-2015
MARINE BIOLOGY

LOWER-DIVISION REQUIREMENTS
Biology  BILD 1  BILD 2  BILD 3
Math  10A  10B  10C  (or 20A  20B  20C)
Chemistry  6A  6B  6C  7L
Physics  1A  1AL  1B  1BL  1C  1CL  (or 2A  2B  2C)
SIO  90

UPPER-DIVISION REQUIREMENTS
1. Marine Biology Core (all courses required)
SIO 132  Introduction to Marine Biology
SIO 134  Introduction to Biological Oceanography
SIO 181  Marine Biochemistry (prerequisite waived for majors)
SIO 136  Marine Biology Laboratory
SIO 139  Current Research in Marine Biology Colloquium

2. Biology Core Courses (all courses required)
SIO 187  Statistical Methods in Marine Biology
BICD 100  Genetics

3. Oceans, Physics and Chemistry Elective (at least one of the following)
SIO 119  Physics and Chemistry of the Oceans (recommended)
SIO 111  Introduction to Ocean Waves
SIO 117  The Physical Basis of Global Warming
SIO 135/236  Satellite Remote Sensing
SIO 141/CHEM 174  Chemical Principles of Marine Systems
SIO 143  Ocean Acidification
ESYS 102  The Solid and Fluid Earth

4. Restricted Electives (at least 5 of the following; 2 must be indicated as Lab courses)
SIO 123  Microbial Environmental Systems Biology
SIO 125  Biomechanics of Marine Life
SIO 126  Marine Microbiology
SIO 127  Marine Molecular Ecology
SIO 128  Microbial Life in Extreme Environments
SIO 129  Marine Chemical Ecology
SIO 133  Marine Mammal Biology
SIO 138  The Coral Reef Environment
SIO 189  Pollution, Environment & Health
CHEM 140A  Organic Chemistry I
CHEM 140B/BH  Organic Chemistry II
BIBC 102  Metabolic Biochemistry
BIEB 102  Introduction to Ecology
BIEB 150  Evolution
SIO 199  Independent Study

LAB ELECTIVES:
SIO 101  California Coastal Oceanography
SIO 104  Paleobiology & History of Life
SIO 126L  Marine Microbiology Lab
SIO 147  Applications of Phylogenetics
SIO 183  Phycology: Biology of Marine Plants
SIO 184  Marine Invertebrates
CHEM 143A/AH  Organic Chemistry Lab
BIBC 103  Biochemical Techniques Lab